of this species do not agree with those of any known species of the genus from India. The tree was identified as *Syzygium neesianum* Arn., an endemic species of Sri Lanka (Ashton 1981). The present discovery is of great phytogeographical interest, and the specimens from Kodayar hills are identical to the Sri Lankan specimen housed in the Madras Herbarium (MH), Botanical Survey of India (Southern Circle), Coimbatore. A short description with illustration is provided to facilitate identification.

***Syzygium neesianum*** Arn., L. Nova. Acta. Phys: Med. Acad. Caes. Teop. Carol. Nat. Cur. 18: 335. 1836; Thw., Enum Pl. Zeyl. 117: 1843; Alston in Trimen, Handb. Fl. Ceylon 6: 116. 1931; Ashton in Dassanayake & Fosberg, Rev. Handb. Fl. Ceylon 2: 442. 1981. *Eugenia neesiana* Wt., Ic. Pl. Ind. Or. t. 533. 1843; Duthie in Hook.f., Fl. Br. India 2: 493. 1879.

Small tree, to 6 m; branchlets terete, glabrous. Leaves opposite-decussate, oblong-lanceolate, 5-8 x 2-3.5 cm, coriaceous, glabrous, chocolate brown when dry, base subacute to subcordate, margin entire, slightly recurved, apex obtusely acuminate; lateral nerves many, sub-parallel; petiole 3 mm long, thick. Flowers 4 mm across, white, in terminal corymbose cymes, to 5 cm long; peduncle 3-10 mm long, terete; rachis 4-angled; pedicel up to 2 mm long; bract inconspicuous. Calyx-tube up to 3 mm long, glabrous; lobes 4, short, obscure. Petals 4, orbicular, up to 2 mm long, calyptrate, fugaceous. Stamens many, unequal, filaments filiform, 2-4 mm, cream; anthers ovate, *c.* 0.5 mm. Ovary inferior, globose, to 2 mm long, 2-loculed; 3-6 ovules in each, with central axile placentae; style filiform, subulate, to 4 mm long; stigma simple, acute at apex.

**Specimens examined**: INDIA: Tamil Nadu, Kanyakumari district: Kodayar (upper) Manickam & Murugan XCH 12454; Kerala — Idukki district: Meenmutti, Mohanan, MH acc. No. 151501; Quilon district, Naduvanoor — Kadavu path, Mohanan MH Acc. No. 113376; Quilon district: way to Thenmalai, Mohanan MH Acc. No. 117379; Trivandrum district: Bonnacard, Mohanan MH Acc. no. 117381. SRI LANKA: MH 60885 (s.no. L.P. 735).

**Note**: The specimens collected from Kerala and kept in MH, are misidentified as *Syzygium caryophyllatum* (L.) Alston, but they belong to *S. neesianum* Arn. due to the presence of leaves with sub-cordate base and, acuminate apex and calyx with 4 lobes.

ACKNOWLEDGEMENTS

We are grateful to the UGC for financial assistance. We thank Dr. R. Gopalan and Dr. V. Chelladurai for their suggestions and critical evaluation of the manuscript. We are grateful to the Field Director, Kalakad-Mundanthurai Tiger Reserve, India for permission to undertake the field studies.

March 30, 2001

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## 40. SOME NEW RECORDS OF ASTERACEAE FOR THE STATE OF MAHARASHTRA

While carrying out intensive plant explorations in southwestern Maharashtra, three members of Family Asteraceae were collected, which on critical study were identified as *Cyathocline manilaliana* Raju and Raju, *Laggera alata* (D. Don) Sch.-Bip. Ex. Oliver and *Wedelia glauca* (Ort.) S.F. Blake. Genus *Cyathocline* Cass. and genus *Laggera* Sch.-Bip. ex Koch. are represented by three species each and genus *Wedelia* Jacq. is represented by five species in

India (Rao *et al.* 1988; Hajra *et al.* 1995a, b; Prabhakar Raju *et al.* 1999).

*Wedelia glauca* (Ort.) S.F. Blake, a member of Compositae-Heliantheae is a native of Central Argentina, Uruguay and extreme south of Brazil. It is a well-known indigenous "weed" in Central Argentina and declared as an agricultural pest. It is toxic to livestock when in fruiting stage (Burkat and Carera 1953). It is poisonous for grazing cattle; in cows it causes abortion of the foetus in a few hours after consumption. The symptoms are somewhat like hydrocyanic acid poisoning (Bhattacharya *et al.* 1995).

The voucher specimens are deposited in the Herbarium of the Shivaji University, Kolhapur (SUK).

***Cyathocline manilaliana*** Prabhakar Raju, C. and R.R. Venkata Raju in Rheedea 9(2): 151-154. 1999.

Erect, aromatic herb; stems often dichotomously branched from the base, glandular, pubescent. Leaves simple, radical and cauline, cauline leaves alternate, sessile, uninerved from base, nerves prominent below; puberulous and glandular on both surfaces, coriaceous; uppermost ovate; lower spathulate or oblong, lyrately lobed. Heads few, in terminal, compound corymbs, heterogamous, not rayed. Involucral bracts two seriate, shorter than florets, often recurved, glandular hairy. Receptacles cup-like, glabrous. Female florets numerous, tubular, filiform, pink, densely glandular-pubescent, 3-lobed, pappus absent. Bisexual florets few, pink-purple, thinly glandular-pubescent, 5-lobed. Stamens 5; anthers sagittately auricled at the base, pappus absent.

**Fl. & Fr.**: December-April.

**Specimen examined**: Salunkhe 1320.

**Locality**: Yeralwadi in Satara district, Maharashtra, India.

**Note**: Earlier it was known only from the type locality: Pochera fields, Adilabad district, Andhra Pradesh State. The present report extends its distribution to Maharashtra.

**Taxonomic note**: The original author of the species referred his specimens to S.R. Yadav (one of the authors), who confirmed that it was an undescribed species. It differs from *Cyathocline lutea* Law ex Wight (yellow flowers) in its pink-purple flowers and *C. purpurea* (Buch.-Ham. ex D. Don) O. Kuntze in possessing white-woolly globose vegetative propagules on stem bases, radical and cauline leaves and deeply sagittate anther base with sharp auricles.

***Laggera alata*** (D. Don.) Sch.-Bip. Ex. Oliver in Trans. Linn. Soc. 29: 94: 1873; Pant in Hajra *et al.* (ed.) Fl. India 13: 148. 1995; Cooke, Fl. Pres. Bombay 2: 80. 1958 (Repr. Ed.) *Erigeron alatum* D. Don. Prodr. Fl. Nepal. 171.1825. *Blumea alata* (D. Don) DC. Prodr. 5: 448. 1836; Hook.f. Fl. Brit. India 3: 271.1881.

Erect, branched, stout herb, stem winged; stems and branches clothed with glandular pubescence. Leaves sessile, decurrent on stem forming entire wing, 2.5-10 x 1-3 cm, oblong, obtuse or subacute, serrate-dentate or rarely entire, pubescent on both surfaces. Heads few, in leafy racemes, 1-1.5 cm in diameter; peduncles axillary, solitary, often drooping; bracteate. Involucre campanulate; bracts many seriate, the outer lanceolate, acute, much shorter than inner, pubescent outside, the innermost scarious, subglabrous, linear, acuminate. Corolla of bisexual florets purplish. Achenes dark brown, puberulous, faintly ribbed, appressedly hairy, villous; pappus white.

**Fl. & Fr.**: December-May.

**Specimen examined**: Sardesai 1907.

**Distribution**: Here and Panhala in Kolhapur district.

**Note**: Earlier it was known from Assam, Bihar, Himachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Orissa, Sikkim, Tamil Nadu and Uttar Pradesh.

***Wedelia glauca*** (Ort.) S.F. Blake. in Contrib. Gray Herb. n. ser. 3(52): 39. 1917. *Pascalia glauca* Orteg. Hort. Matr. Dec. 39. t.

4. 1797; Bhattacharya *et al., J. Bombay nat. Hist. Soc. 92*: 136-137. 1995.

Perennial herb. Stem with longitudinal striations, scabrous. Leaves simple, opposite, distichous, base narrow, apex acuminate, generally 1-2 dentate in lower part of lamina. Heads solitary in the leaf axils, 1-1.5 cm in diameter, heterogamous, radiate. Disc florets hermaphrodite, fertile, involucre hemispherical; peduncles hairy; bracts 2-seriate; outer linear, shortly acuminate, acute or rounded at apex, inner lanceolate, acuminate. Palea membranous, folded, oblong-lanceolate, acute. Florets bisexual; corolla yellow; ligulate in female flowers, 5-fid at apex. Style branched in the appendix, hairy at the apex. Achenes obovoid, more or less compressed, cuneate, rugulose or glabrous, ray flattened above. Disc tetragonal, laterally compressed. Pappus minutely scaly, short.

**Fl. & Fr.**: December-April.

**Specimen examined**: Shimpale 101.

**Distribution**: Islampur in Sangli district.

**Note**: Earlier it was known only from Tiruppur, Coimbatore from the State of Tamil Nadu.

ACKNOWLEDGEMENTS

We thank Liliana Katinas, La Plata, Argentina; the Head, Department of Botany, Shivaji University, Kolhapur, the Principal, Krishna Mahavidyalaya, Shivnagar, Rethare Bk., District Satara, for facilities and the Botanical Survey of India, Western Circle, Pune for herbarium and library facilities.

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REFERENCES

BHATTACHARYA, A., M.C. BISWAS & H.S. DEBNATH (1995): A new genus for India. *J. Bombay nat. Hist. Soc. 92*: 136-137.

BURKAT, A. & M.N. CARERA (1953): Estudios Sobre Malezas Morphologia Vegetativa y Germinacion del "Sunchillo" (*Wedelia glauca*). Darwiniana, t. 10, No. 2: 113-144.

PRABHAKAR RAJU, C. & R.R. VENKATA RAJU (1999): *Cyathocline manilaliana* (Asteraceae) — a new species from Andhra Pradesh, India. *Rheedea 9(2)*: 151-154.

RAO, R.R., H.J. CHOWDHERY, P.K. HAJRA, S. KUMAR, P.C. PANT, B.D. NAITHANI, B.P. UNIYAL, R. MATHUR & S.K. MAMGAIN (1988): Florae Indicae Enumeratio - Asteraceae. BSI, Calcutta.

HAJRA, P.K., R.R. RAO, D.K. SINGH & B.P. UNIYAL (1995a): Flora of India, Asteraceae (Anthelmideae-Heliantheae). BSI, Calcutta, pp vii. + 454.

HAJRA, P.K., R.R. RAO, D.K. SINGH & B.P. UNIYAL (1995b): Flora of India, Asteraceae (Inuleae-Vernonieae). BSI, Calcutta, pp. vii + 411.

## 41. EMENDING OF AN ENDEMIC AND CRITICALLY ENDANGERED SPECIES *CINNAMOMUM WALAIWARENSE* KOSTERM., FAMILY LAURACEAE, OF KALAKAD-MUNDANTHURAI TIGER RESERVE, INDIA

(*With one text-figure*)

Kostermans (1983) described a new species, *Cinnamomum walaiwarense* based on fruiting specimens (26252 & 26301, K, L) collected during July 1976 in the southern